RAMCO-GERSHENSON PROPERTIES TRUST

A Sound investment in WAN acceleration

BACKGROUND – RAMCO-GERSHENSON

Ramco-Gershenson Properties Trust (NYSE: RPT) is a publicly traded Real Estate Investment Trust based in Farmington Hills, Michigan. The Trust owns, develops, acquires, and manages shopping centers located primarily in the Midwest, Mid-Atlantic, and Southeastern United States. Their current portfolio consists of 78 shopping centers, 77 community centers, and a mall.

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— GARY GOERKE, DIRECTOR OF INFORMATION TECHNOLOGY

In 2005, Ramco-Gershenson made a strategic decision to open up regional offices as a way to better serve clients throughout the United States. Upon opening the first location in Florida, they immediately discovered a problem with application performance across the WAN, including their ability to effectively handle weekly backups.

There was a concern at the executive level that the issues in Florida would set a negative tone for the company's ambitious regionalization efforts, or perhaps jeopardize the project entirely. As a result, considerable effort was given to finding a solution to the company's WAN performance problems.

THE CHALLENGES OF REGIONALIZATION

"Remote users required much more interaction with data in the corporate office than we expected," said Gary Goerke, Director of Information Technology at Ramco-Gershenson. "Due to poor WAN performance, employees were waiting an extraordinary amount of time to access data. We quickly discovered that we had an inadequate IT plan to meet our business objectives."

The company relies on a variety of applications to handle day-to-day business, which includes the sharing of large volumes of information pertaining to numerous investment properties. Key Ramco-Gershenson applications include custom accounting and Enterprise Resource Planning (ERP) software, email, document management systems, and in-house videoconferencing facilities. In addition, VoIP is used across the WAN to extend the company's investment in Cisco AVVID products and create a universal platform for telephony across all Ramco facilities.

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The company also underestimated the impact that regionalization would have on disaster recovery. Adding additional sites significantly increased the volume of traffic that the company was required to backup and placed a significant burden on their WAN connection.

Customer: RAMCO-GERSHENSON

Quick Ramco-Gershenson Facts

- Publicly traded Real Estate Investment Trust based in Michigan; over $1 billion in assets
- Owns shopping centers, community centers, and malls throughout the Midwest, Mid-Atlantic, and Southeastern United States.
- Began establishing regional offices in 2005, starting in Florida
- Experienced poor application performance across WAN — email, document management, VoIP, video-conferencing, accounting, and ERP
- Difficulty performing weekly backups across WAN

Silver Peak Results

- Deployed Silver Peak NX-3500 appliances
- 10x improvement in network backups (reduced from 90 minutes to under 9 minutes)
- 4–5x improvement in real time traffic
- Average 20x improvement in email, web, and bulk applications
- Saved $10,000 per WAN link in annual bandwidth savings; $30,000 per regional location in hardware and facilities costs

"For compliance reasons, we perform full backups of our data at least once a week," said Goerke. "This process became time consuming across the WAN and began to starve out other applications as it used more and more bandwidth."

FINDING A SOLUTION

Ramco-Gershenson initially explored WAN bandwidth upgrades as a way of addressing their remote office performance problems. However, this raised two primary concerns. For one, the IT department felt that bandwidth constraints were only part of the problem. Poor VoIP and videoconferencing performance, in particular, was likely a result of high latency and WAN packet loss, not just limited bandwidth. In addition, these real-time applications were deployed alongside bursty and bandwidth-hungry applications, such as email, document management, and network backup. As a result, there was a need for sophisticated Quality of Service (QoS) and bandwidth management to ensure that all applications worked properly across a converged network. Throwing bandwidth at the WAN would not solve their application delivery problems.

Secondly, the company expected significant growth in their regional offices which would require them to relocate in a short amount of time. Most service providers required a 1–2 year minimum contract for WAN bandwidth, which they would have to break in the event they switched facilities.

"When we factored in the installation and early termination fees with the cost of the additional bandwidth, it became clear that upgrading our WAN links was not the most cost-effective approach to improving application performance."

The company quickly turned to Silver Peak's WAN acceleration solution as a way of addressing their application performance and disaster recovery challenges. Silver Peak NX appliances were deployed at several regional locations and at Ramco-Gershenson's main data center in Michigan. The appliances are used to inspect all incoming and outgoing WAN traffic using Silver Peak's Network Memory technology. This information is stored as local instances on the appliances, enabling future requests for the same data to be handled locally. This concept, known as Local Instance Networking, has led to 10–20x average improvements in application performance across Ramco-Gershenson's WAN and 98% reductions in WAN bandwidth in some instances. For example, network backups were consistently reduced from 90 minutes to under 9 minutes when performed across the Silver Peak solution.

By working at the network layer of the ISO stack, Ramco-Gershenson was able to run all business-critical traffic through the Silver Peak solution, including their VoIP and videoconferencing traffic. Silver Peak not only reduced the amount of data sent across the WAN by these applications, but it used various techniques to improve the performance of real-time traffic, including loss mitigation, compression, and packet coalescing. On average, the company saw 4–5x performance improvements when using Silver Peak to deliver real-time applications across their WAN.

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A SOUND INVESTMENT

Ramco-Gershenson estimated that the Silver Peak solution saved over $10,000 per WAN link in annual bandwidth costs and installation/termination fees. For a company at the beginning of a national regionalization project that would potentially involve dozens of WAN links, this level of savings proved to be significant. In addition, by centralizing all application servers and storage, the company did not have to duplicate data center resources in regional facilities. This saved an additional $30,000 per regional facility in capital equipment and facilities costs.

"Silver Peak offered a no-risk solution that paid off in spades," said Goarke. "The volume of help desk complaints decreased dramatically within the first week of deploying the NX appliances — as much as 90% in some instances. That may not be the most scientific way of measuring success, but it keeps my hair from turning gray."

Most importantly, Silver Peak has enabled Ramco-Gershenson to move forward with their regionalization project, an endeavor that has the attention of the company's senior management team. By facilitating disaster recovery and ensuring reliable application delivery, Ramco-Gershenson has a successful blueprint for server centralization and remote office application delivery. When shopping for a WAN acceleration solution, Ramco-Gershenson found a sound investment in Silver Peak.

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